**Multiple choice questions:**

**Lesson 1:**

1. How can one centrally manage resources programmatically and create new accounts with a single payment method?

Options:

1. AWS Single-sign on
2. AWS Organizations
3. AWS Federated User Account
4. IAM root account

Answer: 2

Explanation:

AWS Organizations helps you centrally manage resources programmatically and scale them. You can even simplify billing by using a single centrally available method.

---------------------------------------------------------------------------------------------------------

2. What is the main reason for having multiple AZ's in one region?

Options:

1. Reliability
2. Reduces dependability
3. Low latency
4. Availability

Answer: 4

Explanation:

Having multiple AZ's in one region means availability is always maintained. In case of one AZ failure, there is another AZ that is always available. Replication becomes easy in the same region within seconds.

---------------------------------------------------------------------------------------------------------

3. Which AWS tool will automate control over multiple services?

Options:

1. AWS Management console
2. AWS CLI
3. AWS Manager
4. AWS SDK's

Answer: 2

Explanation:

The AWS Command Line Interface (CLI) could be a unified tool to manage your AWS services. With only one tool to transfer and track, you'll management multiple AWS services from the statement and automatize them through scripts.

---------------------------------------------------------------------------------------------------------

4. Which of the following is considered an advantage of cloud computing where you can scale up and down in few minutes?

Options:

1. Stop guessing capacity
2. Scale quickly
3. Increase speed and agility
4. Go global in minutes

Answer: 1

Explanation:

Stop guessing capacity means to rliminate guessing on your infrastructure capacity needs. When you make a capacity decision before deploying an application, you often end up either sitting on expensive idle resources or dealing with limited capacity.

---------------------------------------------------------------------------------------------------------

5. What is cloud computing mainly based on which service?

Options:

1. Platform as a Service
2. Infrastructure as a Service
3. Software as a Service
4. Database as a Service

Answer: 2

Explanation:

The main idea behind cloud computing is infrastructure. A large machine (at the data centre) is installed, then used to create virtual machines globally. The cloud provider manages everything (Infrastructure). You have to manage the virtual servers.

**Lesson 2:**

1. AWS provides an excellent experience to customers in multiple regions with minimal cost. What exactly is it referring to?

Options:

1. Stop guessing capacity
2. Benefit from massive economies of scale
3. Go global in minutes
4. Trade capital expense for variable expense

Answer: 3

Explanation:

All of the above options are advantages of cloud computing. Going global in minutes means it provides a better experience to customers globally in minutes with minimum cost.

---------------------------------------------------------------------------------------------------------

2. Which of the following is not a benefit of cloud computing?

Options:

1. Agility

2. Deployment in minutes

3. Elasticity

4. High Availability

Answer: 4

Explanation:

High availability is a feature of the multi-region, multi AZ's servers placement.

Rest all are benefits of cloud computing.

---------------------------------------------------------------------------------------------------------

3. Select assurance programs with which it complies as listed by AWS (choose 2)

Options:

1. FISMA, DIACAP, and FedRAMP
2. ISO 9001, ISO 27001, ISO 27017, ISO 27018
3. SOC 4, SOC 5
4. PSI level 2
5. PCI level 3

Answer: 1, 2

Explanation:

There are various assurance programs as listed by AWS. They are as follows:

FISMA, DIACAP, and FedRAMP

ISO 9001, ISO 27001, ISO 27017, ISO 27018

SOC 1/ISAE 3402, SOC 2, SOC 3

PCI DSS Level 1

Rest all options are bogus.

---------------------------------------------------------------------------------------------------------

4. What eliminates the need to maintain software, patching and resource procurement in cloud computing?

Options:

1. SaaS

2. PaaS

3. IaaS

4. DaaS

Answer: 2

Explanation:

PaaS is a cloud computing model that eliminates the need to patch and maintain software. Hence, you can focus more on the deployment part.

---------------------------------------------------------------------------------------------------------

5. You have a database running in a private subnet and an application server in the public subnet. There is a requirement to update the system patches in the database server without connecting to the internet directly. How can this be achieved?

Options:

1. Using NAT gateway in a private subnet
2. Using NAT gateway in a public subnet
3. Using internet gateway
4. Using VPC endpoint

Answer: 2

Explanation:

NAT gateway is a fully managed service used to connect the private subnet to the internet without directly connecting to it. A private subnet is routed through the NAT gateway, then routed to the internet in a public subnet. Hence, updating the patches and system updates.

---------------------------------------------------------------------------------------------------------

**Lesson 3:**

1. You are a Solutions Architect, and you have been asked to build a fully managed database with a Multimaster database, possessing key-value pair. Which service would you choose?

Options:

1. Amazon RDS
2. Amazon Redshift
3. Amazon DynamoDb
4. AWS Athena

Answer: 3

Explanation:

Amazon DynamoDb is a fully managed and key-value database service with multi-master and multi-region capability. It delivers millisecond performance.

---------------------------------------------------------------------------------------------------------

2. AWS tool that helps reduce your need to scale the infrastructure and operate your own source control system:

Options:

1. AWS CodeDeploy
2. AWS CodeCommit
3. AWS CodeBuild
4. AWS CodeStar

Answer: 2

Explanation:

AWS CodeCommit is a tool that is a fully managed and highly scalable source control service. It reduces the need to scale the infrastructure.

---------------------------------------------------------------------------------------------------------

3. You are working on-premises on a project that urgently needs to transfer and store data on the cloud and is network resilient. Which AWS service will you choose?

Options:

1. AWS Direct connect
2. AWS Storage gateway
3. AWS VPN endpoint
4. AWS S3

Answer: 2

Explanation:

AWS Storage Gateway is hybrid cloud storage used to store data on the cloud-connected to on-premise devices. It is a highly available and resilient network service.

---------------------------------------------------------------------------------------------------------

4. Which SQL based service helps in populating and analyzing large datasets within minutes?

Options:

1. Amazon Athena

2. Amazon RDS

3. Amazon PostgreSQL

4. Amazon Redshift

Answer: 1

Explanation:

Amazon Athena is a serverless service that analyses data in S3 using SQL queries. It also helps in populating large data sets with fresh data and analyzing them.

**--------------------------------------------------------------------------------------------**

5. You are working as a Solutions Architect in a company and have been asked to monitor the microservices running in the cloud. Which service would you suggest?

Options:

1. AWS transit gateway

2. AWS App Mesh

3. Amazon Cloudtrail

4. Amazon CloudWatch

Answer: 2

Explanation:

AWS App Mesh helps to control and monitor the microservices running in the cloud. It helps in ensuring high availability for applications giving visibility.

**Lesson 4:**

1. What allows you to call AWS API's and access the AWS management console without creating an individual user identity?

Options:

1. IAM role

2. AWS organization

3. Federated user

4. IAM principle user

Answer: 3

Explanation:

IAM allows you to enable identity federation to allow users, roles, groups to access management console, call API and resources without creating an IAM user.

2. Your application is experiencing some unwanted changes and cross-site scripting. What will help you to stop these attacks from making any changes to your application?

Options:

1. AWS shield
2. AWS WAF
3. Security group rules
4. AWS secrets manager

Answer: 2

Explanation:

AWS WAF (Web Application Firewall) allows you to create custom rules that help you specify which traffic to allow or block to access your application. Thus it helps from compromising security and availability.

3. AWS service that helps determine deleted and existing AWS accounts at any point in time is:

Options:

1. AWS cloudwatch
2. AWS config
3. AWS Service catalog
4. AWS cloudtrail

Answer: 2

Explanation:

Being a fully managed service, AWS config helps you to create rules that check for the configuration recorded, including deleted and existing AWS accounts automatically. It also helps with the security analysis.

4. Your company is undergoing an audit to optimize cost and is keen on real-time guidance to provide resources. Which AWS service will help you with this issue?

Options:

1. AWS Managed services

2. AWS Personal Health Dashboard

3. AWS Trusted Advisor

4. AWS Cloudtrail

Answer: 3

Explanation:

AWS Trusted Advisor helps with real-time guidance to provision resources. It is an online resource that helps you with performance, security and cost optimization.

5. A manager in your company has been given administrator access to set the maximum permissions. Which resource policy will help him do so?

Options:

1. Permissions boundaries
2. IAM policy
3. Attribute-based access control
4. AWS Resource Access Manager

Answer: 1

Explanation:

Permissions boundaries are considered one property of granting the least privilege and can set the maximum permissions. It enables you to manage the permissions but considering limitations.

**Lesson 5:**

1. Which of the following feature does not sums up to optimize the costing in the cloud?

Options:

1. Expenditure and usage awareness

2. Optimize over time

3. Cost aware culture

4. Manage demand and supplying resources

Answer: 3

Explanation:

Cost aware culture is the best practice for cloud financial management.

Rest all focus on cost optimization.

2. The AWS support plan that has pricing greater of 15000$ or 3% of monthly usage over 1M$:

Options:

1. Developer

2. Business

3. Enterprise

4. Standard

Answer: 3

Explanation:

Enterprise support plan has pricing greater than $15000 or 3% of monthly usage over $1M.

Developer has a greater of $29 /month.

Business has greater of $100 /month.

Standard is not an appropriate option.

3. How many reserved instances can you purchase each month per availability zone?

Options:

1. Unlimited

2. 20

3. 15

4. 25

Answer: 2

Explanation:

There is a limit of purchasing 20 reserved instances each month per availability zone. If you wish to purchase more, you need to fill a form available through your sign-in account. Once purchased, they are non-refundable. You can then sell them on the AWS marketplace.

4. Which of the following ARN format for resource group is correct?

Options:

1. arn:aws:resource-groups:region:account:group/group-name
2. arn:aws:resource-groups:account:region::group/group-id
3. aws:arn:resource-groups:account:region:group/group-name/iam-role
4. arn:aws:resource-groups:region:account:account-id:group/group-name

Answer: 1

Explanation:

In AWS resource groups, the only available resource is a group. AWS resource groups have unique Amazon Resource Names (ARNs) associated with them. Hence, the format.

Rest all options are invalid.

5. Choose two reasons that differentiate the actual cost from estimated cost.

Options:

1. Tiered pricing
2. The free tier, promotional credits and discounts
3. Burstable instances
4. Users
5. Workloads

Answer: 1 & 2

Explanation:

There are various reasons that your actual cost may be different than your estimated cost, i.e.,actual usage, region used, change in prices, taxes, timeframe assumptions, 12-month totals, free tier, promotional credits and discounts, monthly billing period, rounding, tiered pricing, per second billing,

third-party licensing fees, currency.